

Revue suisse Zool.	Tome 97	Fasc. 4	p. 895-899	Genève, décembre 1990
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New synonymies and notes on some Aphodiinae (Coleoptera: Scarabaeidae)

by

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With 8 figures

ABSTRACT

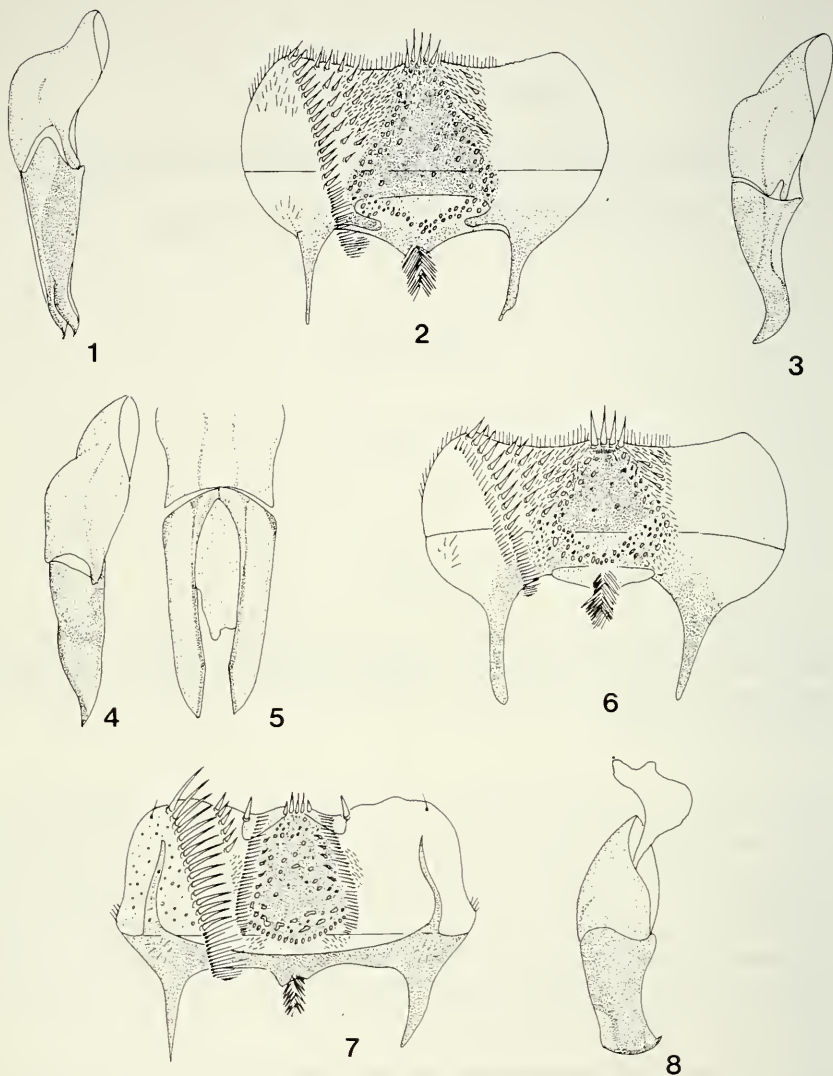
Four *Aphodius* spp. and two *Ataenius* spp. are synonymized, the status of the subgenus *Ataeniomorphus* is discussed. *Aphodius australasiae* Boh. is transferred to *Ataenius*, *Aphodius kuatunensis* Balth. is found to be a separate species close to *A. nigrotessellatus* Motsch.

In revising the Aphodiinae collection of the Muséum d'Histoire naturelle, Geneva (MHNG), the Zoological Museum, University of Moscow (ZMUM), the National Museum, Prague (NMP), and the Institute of Systematic and Experimental Zoology, Kraków (ISEZ), I have examined nomenclatory relevant material including types of Petrovitz, Balthasar, and Motschulsky. The comparison revealed several synonymies and misinterpretations which are discussed below. This paper does not, however, provide a complete list of all mistakes recently noticed. Further contributions will be presented after examining respective material from additional sources.

***Aphodius* (*Aphodaulacus*) *variabilis* Waterhouse (figs 1-2)**

Distribution. Japan, Korea, North China, USSR (Far East). Remarks. The species tends to form local populations with notable variability in the plotting of darker spots, in the pilosity of elytra and in the punctuation of pronotum. See remarks under the following species.

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FIGS 1-8.

- 1-2. *Aphodius (Aphodaulacus) variabilis* Waterh.: 1. aedeagus laterally; 2. epipharynx.
 3. *A. (Chilothorax) nigrotessellatus* (Motsch.) aedeagus laterally. 4-6. *A. (Ch.) kuatunensis* Balth.:
 4. aedeagus laterally; 5. paramerae dorsally; 6. epipharynx. 7-8. *Ataenius (australasiae) australasiae*
 (Boh.): 7. epipharynx; 8. aedeagus laterally.

Aphodius (Aphodaulacus) nigrotessellatus Motschulsky (fig. 3)

Material examined. Syntype of *nigrotessellatus* (ZMUM); specimens from Japan: Kanagawa Pref., Mt. Ooyama, 25.XII.1966, leg. Shibata (ISEZ). China: Fukien, Kuatun, 20-21.III.1946, leg. Tschung-Sen (MHNG).

Distribution. Japan, Korea, China, USSR (Far East).

Remarks. The two species listed above were hitherto misidentified in the collections and generally quoted in literature under incorrect names. NAKANE (1972) rightly considered *A. obsoleteguttatus* Waterh. synonymous with *A. nigrotessellatus* and regarded *A. variabilis* as a valid species. The syntype of "*Melinopterus nigrotessellatus*" in Motschulsky's collection differs from *A. variabilis* in the characters separating the subgenera *Chilothorax* Motsch. (= *Volinus* Muls. et Rey) and *Aphodaulacus* W. Kosh.

Aphodius (Chilothorax) kuatunensis Balthasar (figs 4-6)

Material examined. Paratypes (3): China, Fukien, Kuatun, 2300 m, 27.III.1938, leg. Klapperich (NMP, MHNG); four specimens collected together with *A. nigrotessellatus* in Kuatun, Fukien, 20-21.III.1946, leg. Tschung-Sen (MHNG, ISEZ).

Remarks. The species is very close to *A. nigrotessellatus* Motsch. but is distinguishable by the shape of the male genitalia and by following external characters: frontal tubercles and punctures of head more pronounced than in *nigrotessellatus*, disc of pronotum more convex; the punctures of inner elytral intervals coarser and denser, lateral part and apex of elytra rugose.

Aphodius (Liothorax) plagiatus (Linnaeus)

Aphodius (Ataeniomorphus) isikdagensis BALTHASAR, 1952, syn. nov.

Aphodius (Ataeniomorphus) resslī PETROVITZ, 1962, syn. nov.

Remarks. *A. isikdagensis* was described by BALTHASAR (1952) in a new subgenus *Ataeniomorphus* on the base of peculiar features of the head. In his monograph BALTHASAR (1964: 446) mentions, that the species is characterized by the large and convex head similarly shaped as in some *Nialus* species. I have seen three type specimens of *isikdagensis* (Turkey, Anatolia), (NMP), and the unique holotype of *A. resslī* (Turkey, Iskenderun), (MHNG), a female specimen in poor condition. Fortunately enough additional material was available to indicate that the differences between the two can all be attributed to infraspecific variation. The unicolorous and bicolorous forms of *A. plagiatus* (L.) are considered conspecific owing to their sympatric distribution and the absence of other significant characters. The specimens seen from Turkey and Iran vary from bicolored to entirely black, and exhibit a pronounced variability in the shape and size of the head as well as in the sculpture of the body. It is hard to understand, indeed, why this species has become the object of such taxonomic operations.

The third and last name in *Ataeniomorphus*, *A. cypricola* described by BALTHASAR (1971, Beitr. Ent., 21: 57) from the vicinity of Larnaka is most likely a representative of the subgenus *Nobius* Muls.

Aphodius (Balthasarianus) babori Balthasar

Aphodius (Balthasarianus) taiwanicus PETROVITZ, 1976, syn. nov.

Material examined. Paratypes (2) of *babori*: China, Szechwan (MHNG, NMP); paratype of *taiwanicus*: Formosa, Duisharyo (MHNG).

Remarks. The species is known so far from South China and Taiwan.

***Aphodius (Calamosternus) uniplagiatus* Waterhouse**

Aphodius (Calamosternus) desuetus BALTHASAR, 1933, syn. nov.

Material examined. Paratypes (2) of *desuetus*: China, Yunan (NMP, MHNG); numerous specimens from Japan, China and Korea (ISEZ).

Remarks. The species is distributed in Japan, China, Korea, the USSR (Far East), and occurs commonly in the northern part of the Korean Peninsula.

***Ataenius (australasiae) australasiae* (Bohemann), comb. nov., figs 7-8)**

Ataenius fukiensis BALTHASAR, 1942, syn. nov.

Ataenius malayanus PETROVITZ, 1961, syn. nov.

Material examined. Holotype of *fukiensis*: China, Fukien (NMP); paratypes (3) of *malayanus*: Sumatra (MHNG); numerous specimens from Indochina and Malaysia (MHNG, ISEZ).

Complementary description. Length 3.8-5.5 mm, colour black, reddish black or castaneous. Head moderately large, strongly convex medially, frontal suture absent. Elytra convex, subparallel-sided, humeri distinctly dentate, base margined. Mesosternum shagreened as usual in *Ataenius* species, without noticeable carina between the coxae. Metasternal plate with two small concavities near meso and metacoxae, metasternal triangle distinct. First visible abdominal sternum with fine posterior marginal line, pygidium with wide, smooth apical lip and transverse ridge medially, eroded area deep and rough. Metafemora with complete posterior marginal line; transverse ridges of meso and metatibiae weakly marked, often vanishing; apical edge of metatibia with 6-7 thick setae and 2-3 thin, intervening setae, the latter not easily seen; apical spurs slender, first segment of metatarsus a trifle shorter than the upper tibial spur and somewhat longer than the next three segments combined. Epipharynx and male genitalia are of the *Ataenius* type.

Remarks. *A. australasiae* is one of the most common and most widely distributed species, known from South China, Vietnam, Burma, Thailand, Malaysia, Borneo, Java, Sumatra, Sulawesi, Bali and the Australian Region. It was listed by Bohemann in the Aphodiini where it has remained ever since. Previous authors attached particular importance to the presence of transverse ridges of meso and metatibiae as in *Aphodius* Illig. This feature, however, is present in some representatives of Eupariini and it lacks in some typical members of Aphodiini. The characters presented in the complementary description show that the species has an isolated position within the genus *Ataenius* Har., and may be referred to a species group of its own.

I have not seen a type material of *Ataenius nigricans* Paulian described from Tonkin. According to the original description (Bull. Soc. Ent. France, 1933: 136), the species seems to be conspecific with *A. australasiae*.

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